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	Application No.	Applicant(s)	
	10/626,491	JAUSSI ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Terry L. Englund	2816	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not include will be mailed in due	ed course. <b>THIS</b>
1. X This communication is responsive to Amdt/Dwgs/TD (Feb	22, 2005) and IDS (Feb 23, 2005);		
2. 🛛 The allowed claim(s) is/are 14-42 (now renumbered as 1-2	9, respectively for printing purposes	<u>)</u> .	
3. $igotimes$ The drawings filed on <u>22 February 2005</u> are accepted by th	ne Examiner.		
4. Acknowledgment is made of a claim for foreign priority un a) All b) Some* c) None of the:  1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" on oted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 6. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftsperson (b) including changes required by the attached Examiner's Paper No./Mail Date  [b) including indicia such as the application number (see 37 CFR 1.6 each sheet. Replacement sheet(s) should be labeled as such in the following requirer's comment regarding REQUIREMENT Following REQUIREMENT Follows attached Examiner's comment regarding Requirement sheet such attached Examiner's comment sheet s	been received.  been received in Application No cuments have been received in this report this communication to file a reply of ENT of this application.  Itted. Note the attached EXAMINER's reason(s) why the oath or declarate the submitted.  The submitted of the submitted	national stage applicational stage applicational stage application of the front (not the li).	quirements OTICE OF
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date 02232005  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	8.  Examiner's Statement	(PTO-413), e nent/Comment	wance

U.S. Patent and Trademark Office PTOL-37 (Rev. 1-04) Application/Control Number: 10/626,491

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### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to the applicants, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

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Claim 29, line 10: added --the-- prior to "present";
line 11: added --the-- prior to "present";
Claim 33, line 11: added --the-- prior to "present";
line 12: added --the-- prior to "present";
Claim 38, line 9: added --the-- prior to "present";
line 10: added --the-- prior to "present";
Claim 40, line 12: added --the-- prior to "present";
line 13: added --the-- prior to "present";
Claim 42, line 7: added --the-- prior to "present"; and
line 8: added --the-- prior to "present."
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The changes above address/correct minor oversights that do not affect the scope of the claims, wherein each of the claims above had the term --the-- added prior to the phrase "present and previous" since the present/previous voltage signals had been previously recited within each claim. Therefore, the above changes relate the later recited reference of the present/previous signals back to their corresponding previous recitation.

#### RESPONSE TO TD/AMENDMENT/DRAWINGS

The amendment, drawings, and terminal disclaimer submitted on Feb 22, 2005 were reviewed and considered with the following results:

The amendment's comments overcame the objection to the declaration. Since this is a continuation, a newly executed oath/declaration is not required (e.g. see 37 C.F.R. 1.63(d)(1)). Therefore, that objection has been withdrawn.

The replacement sheets of drawings overcame the various objections to the drawings described in the previous Office Action, which have now been withdrawn.

The amended disclosure overcame the objections to the title and disclosure, and these objections have also been withdrawn.

The cancellation of claims 1-13 rendered their objections and rejections moot.

Amended claims 16, 19-23, and 25 overcame the objections of claims 16, 19-23, and 25-28. Therefore, those claim objections have been withdrawn. Although several minor concerns were noted in some of the newly added claims, these were all addressed/corrected by the Examiner's Amendment described above.

The amended claims also overcame the rejections of claims 14-28 under 35 U.S.C. 112, which have now been withdrawn.

The terminal disclaimer (TD) was approved, overcoming the double patenting rejections of claims 14-28 described in the previous Office Action. The TD also prevented any double patenting rejections to be made with respect to the amendment's newly added claims 29-42.

Therefore, there is no known objection or rejection remaining within the present application.

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#### REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

None of the prior art references reviewed and considered shows/discloses the filtering method, communication system, and/or filter circuit as recited within independent claims 14, 25, 29, 33, 38, 40, and 42. More specifically, none of the references clearly shows/discloses at least first/second differential pairs biased by their respective first/second signals, wherein first/second output nodes correspond to transistors receiving their associated signal with the understanding that the signals comprise present and previous type signals (e.g. one signal is received prior to another signal), the first/second output terminals (or nodes), and the method (or circuit) also includes: 1) the first/second differential inputs being weighted as recited within claim 14, upon which claims 15-24 depend; 2) the filter receiving the first/second differential inputs from the same-and-hold circuit as recited within claim 25, upon which claims 26-28 depend; 3) the tail current differential relates to a difference in channel widths as recited within claim 29, upon which claims 30-33 depend); 4) the first/second offset-inducing differential pairs as recited within claim 33, upon which claims 34-37 depend; 5) the differential pair transistors are pchannel MOSFETs as recited within claim 38, upon which claim 39 depends; 6) the third differential transistor pair biased by a subsequent first voltage signal as recited within claim 40, upon which claim 41 depends; and 7) the transistors biased by the present/previous first voltage signals have a first output node, and the transistors biased by the present/previous second voltage signals have a second output node, as recited within claim 42. [Note: Although various prior art references show/disclose at least first/second differential pairs receiving their respective input signals, the signals are typically: 1) the same (i.e. the differential pairs both receive identical

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signals); or 2) independent (i.e. one set of signals does not correspond to the other set of signals). Also, this examiner does not consider a signal that is merely a delayed version of another signal as a <u>present</u> signal with respect to the <u>original</u> signal received. For example, in the present application, it is understood that a sample-and-hold circuit receives a (present) signal, and also holds a value with respect to a previously (or prior) received signal. These are the types of signals that the present and previous types of signals within the claims refer to.] Since there is no strong motivation to modify or combine any prior art reference(s) to ensure present/previous type signals are applied to their corresponding differential pair, as well as the other recited limitation(s) described above with respect to claims 14, 25, 29, 33, 38, 40, and 42, all the active claims (i.e. 14-42) are deemed patentably distinct over the prior art of record.

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Claims 14-42 are allowed, and have been renumbered as 1-29, respectively for printing purposes. The renumbering takes into account the cancellation of claims 1-13.

### **PRIOR ART**

The prior art references cited on the IDS submitted Feb 23, 2005 were reviewed and considered. All of these references were cited in the parent application 10/041,677, which was issued as U.S. Patent 6,624,688 B2 on Sep 23, 2003. The three references that are lined through on the Feb 23<sup>rd</sup> IDS were previously considered, and had been cited on the examiner's PTO-892 sent out with the previous Office Action. Those three references were deemed to be the most relevant references with respect to the claimed limitations, wherein none of the other references clearly shows/discloses either the understood previous and present type signals, or the at least two differential pairs, as recited within the independent claims.

Any comments considered necessary by the applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication, or previous communications, from the examiner should be directed to Terry L. Englund whose telephone number is (571) 272-1743. The examiner can normally be reached Monday-Friday from 7 AM to 3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached on (571) 272-1740.

The new central official fax number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1562.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Terry L. Englund

12 May 2005

TUAN T. LAM RIMARY EXAMINER Applicant: James E. Jaussi et al.

Serial No.: 10/626,491 Filed: July 24, 2003 Page: 13 of 17 Attorney's Docket No.: 10559-554002 / P12574C

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## AMENDMENTS TO THE DRAWINGS

The attached replacement sheets (6 pages) of drawings include changes to Figs. 1-5 and replace the originally-filed set of 6 pages.

In Figs. 1-5, the Applicants have added labels to identify  $V_{out}$ + and  $V_{out}$ .

In Fig. 2, the Applicants have shown the configuration described in the specification by swapping the inputs labeled  $V_{N-1}$ + and  $V_{N-1}$ .

Applicants request that the Examiner approve and enter the attached drawings (Figs. 1-6) as formal drawings.

Attachments following the last page of this Amendment:
Replacement Sheets (6 pages)

REPLACEMENT SHEET
Page 1 of 6
FILTERING VARIABLE OFFSET AMPLIFIER
James E. Jaussi et al.
10/626,491
10559-554002

Approved
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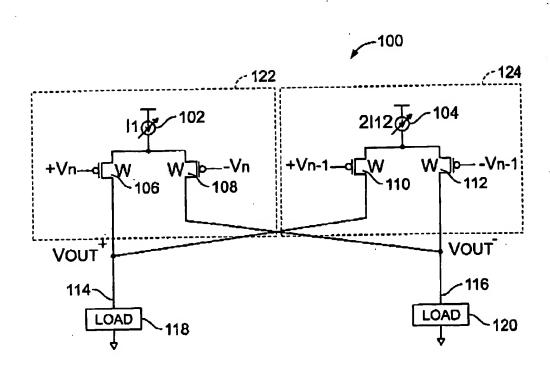


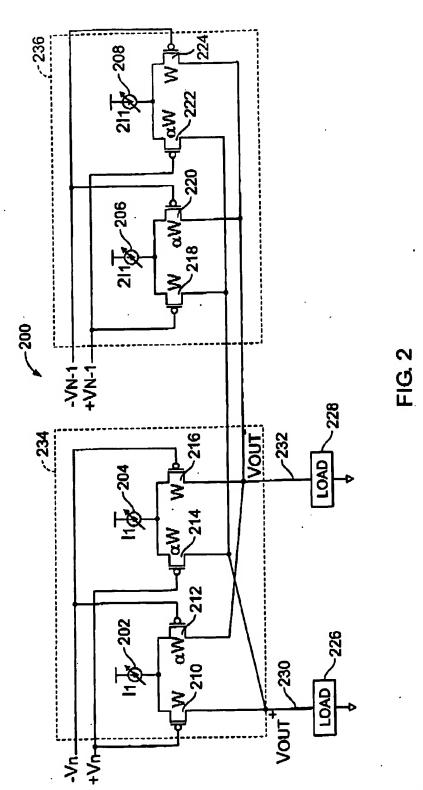
FIG. 1

REPLACEMENT SHEET
Page 2 of 6
FILTERING VARIABLE OFFSET AMPLIFIER
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10/626,491
10559-554002

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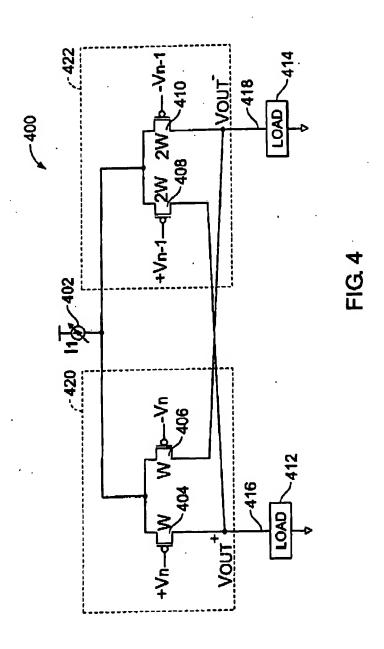
# REPLACEMENT SHEET Page 3 of 6 FILTERING VARIABLE OFFSE'T AMPLIFIER James E. Jaussi et el. 10/626,491 10559-554002

Approved
The 350 VOUT 5116 +Vn+1

PAGE 23/27 \* RCVD AT 2/22/2005 9:54:43 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-1/1 \* DNIS:8729305 \* CSID:612 288 9596 \* DURATION (mm-ss):06-42

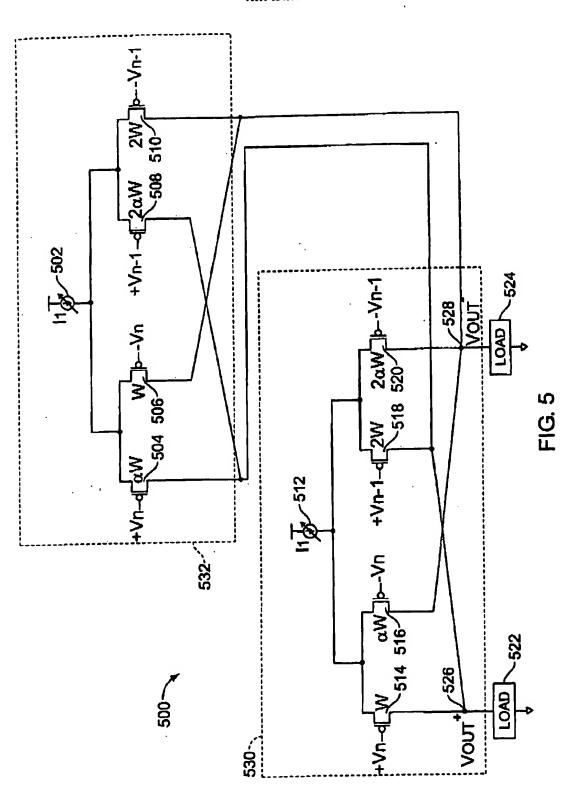
REPLACEMENT SHEET
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FILTERING VARIABLE OFFSET AMPLIFIER
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REPLACEMENT SHEET
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APP. 11.05



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REPLACEMENT SHEET
Page 6 of 6
FILTERING VARIABLE OFFSET AMPLIFIER
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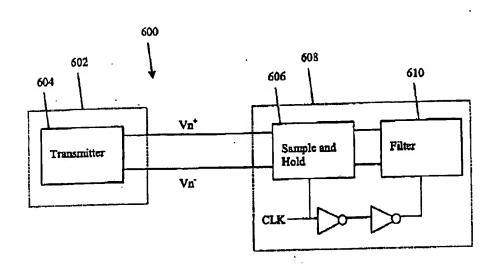


FIG. 6